

CLAIMS

1. A magnetic data eraser comprising:
 - a power supply circuit adapted to generate an attenuating alternating
 - 5 voltage whose peak value reduces as time passes;
 - a receptacle adapted to accommodate a magnetic recording medium;
 - and
 - an electric coil for degaussing the magnetic recording medium,
 - being adapted to apply the attenuating alternating voltage generated in
 - 10 the power supply circuit to the coil to generate within the receptacle an attenuating alternating magnetic field whose peak value of magnetic flux density reduces as time passes.
2. The magnetic data eraser as defined in claim 1,
 - 15 wherein the receptacle is adapted to accommodate a computer body incorporating the magnetic recording medium and to erase magnetic data on the magnetic recording medium incorporated in the computer body accommodated in the receptacle.
- 20 3. The magnetic data eraser as defined in claim 1,
 - wherein the coil is wound around the outer periphery of the receptacle.
4. The magnetic data eraser as defined in claim 1,
 - wherein the power supply circuit comprises a capacitor and a charging
 - 25 circuit for charging the capacitor and is adapted to discharge an electrical charge charged in the capacitor via the coil.

5. The magnetic data eraser as defined in claim 1,
wherein the power supply circuit comprises a plurality of capacitors connected in series and a plurality of charging circuits for charging the respective capacitors and is adapted to discharge an electrical charge charged
5 in each of the capacitors via the coil.
6. The magnetic data eraser as defined in claim 1,
having a plurality of coils wound around discrete parts of the outer periphery of the receptacle,
10 being adapted to sequentially generate an attenuating alternating magnetic field within the receptacle corresponding to the parts around which the coils are wound by sequentially applying a voltage applied from the power supply circuit to each of the coils.
- 15 7. The magnetic data eraser as defined in claim 1,
wherein the electric coil is a single coil wound around the outer periphery of the receptacle and is adapted to generate a magnetic field having a maximum field strength within a range of 199000 A/m to 279000 A/m.
- 20 8. The magnetic data eraser as defined in claim 1,
wherein at least one coil is wound around the outer periphery of the receptacle, and
wherein the receptacle is adapted to accommodate a computer body or a magnetic recording medium of large size,
25 one of the at least one coil is adapted to generate a magnetic field having a maximum field strength within a range of 358000 A/m to 438000 A/m.

9. The magnetic data eraser as defined in claim 1,
wherein the power supply circuit has a polarity reversing switch for reversal of voltage polarity applied to the coil.

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10. A magnetic data eraser comprising:
a capacitor to which a predetermined DC voltage is applicable;
an electric coil for generating a magnetic field and connected to the capacitor in parallel; and

10 a switching device interposed between the capacitor and the coil,
being adapted to erase magnetic data by means of a magnetic field generated by the coil by controlling the switching device to discharge an electrical charge charged in the capacitor,

wherein the coil has an inductance and an internal resistance and the
15 capacitor has an applied voltage, each being set at a predetermined value so that the discharge of the capacitor into the coil generates a rebound phenomenon at least once, whereby a direction of the magnetic field is reversed by a reversed electrical current flowing in the coil with a change in polarity of transient voltage.

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11. The magnetic data eraser as defined in claim 1,
wherein the coil has an inductance of 100 H or more but not more than 200 H and an internal resistance of 2.5 Ω or more but not more than 5 Ω , and
wherein the capacitor has a capacity of 4700 μF or more but not more
25 than 9400 μF .

12. The magnetic data eraser as defined in claim 1 further comprising:

a box-shaped casing made of a magnetic material and adapted to accommodate the coil therewithin.

13. The magnetic data eraser as defined in claim 1,

5 wherein the coil has a wire diameter of 1.2 mm or more.

14. A method for erasing recorded magnetic data comprising step of applying an attenuating alternating magnetic field to a computer body incorporating a magnetic recording medium so that the magnetic field
10 surrounds the computer body, with the peak value of magnetic flux density of the magnetic field reducing as time passes, so as to degauss the magnetic recording medium.

15. A method for erasing magnetic data comprising:

15 providing a capacitor to which a predetermined DC voltage is applicable;

providing an electric coil for generating a magnetic field;

connecting the capacitor with the coil in parallel;

interposing a switching device between the capacitor and the coil; and

20 controlling the switching device so as to discharge an electrical charge charged in the capacitor into the coil for generating a magnetic field,

wherein the discharge of the capacitor into the coil generates a rebound phenomenon at least once, whereby a direction of the magnetic field is reversed by a reversed electrical current flowing in the coil with a change in
25 polarity of transient voltage.